1. INTRODUCTION

PURPOSE

Growth in traffic volumes in Placer County and the broader region has increased the frequency and severity of traffic-related issues on neighborhood streets. Numerous agencies across the nation have confronted these problems using a proven process and tools to address both safety and quality-of-life concerns. The process is known as a Neighborhood Traffic Management Program (NTMP), which uses traffic calming tools and techniques.

The purpose of this document is to define a NTMP that is customized to the needs and unique characteristics of Placer County's residential streets.

OVERVIEW

According to the Institute of Traffic Engineers, *Traffic calming is the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users.* As alluded to in the definition, the negative effects of vehicle speeds and/or excessive traffic volumes on neighborhood streets can diminish the residential quality of life. While residential life "quality" is subjective, vehicle speeds and traffic volumes can be quantified and compared against adopted community or industry standards. Experiences reinforce this notion as some community residents embrace traffic calming, while others are not so willing to accept the inconveniences of traffic calming in lieu of a perceived improvement in residential quality of life.

With this in mind, the Department of Public Works (DPW) has initiated a comprehensive program that includes a systematic approach to handling neighborhood traffic requests, and applying the most appropriate traffic calming measures for the situation at hand. The NTMP also engages community residents during the development of individual neighborhood traffic calming plans and determines neighborhood support for the plan through a neighborhood vote.

The process defined herein is intended solely for use on public streets and is not applicable on non-County maintained roadways (i.e., private roads). However, use of this manual as a guideline for non-County roadways, will require oversight by the Fire District on the planning, design, and implementation of such features. Eligible County maintained roadways (i.e., public roads) include two-lane urban and rural local roads and two-lane urban and rural collector roads.

The terms "local" and "collector" streets refer to the functional classification that denotes a specific level in the transportation network hierarchy and specifies the design according to Placer County standards. While the streets may have been designed for a particular purpose, they may in reality function differently than intended. Therefore, it may be difficult to differentiate between the two. Following is a narrative description of each roadway classification:

- Local Streets provide direct access to residential properties and facilitate short neighborhood trips.
 Typical local street features include:
 - 24 28 foot travel way
 - Serves fewer than 50 residential units on a cul-de-sac or 75 residential units on a through street

- Collector Streets are secondary roads that connect motorists from surrounding local streets to arterial roadways and freeways and facilitate intermediate trip lengths. Typical collector street features include:
 - 32 40 foot travel way
 - Serves more than 75 residential units.

Eligibility of rural streets for traffic calming requires an additional level of scrutiny beyond that of urban streets. Many rural streets in Placer County serve as alternative routes for commuters and can generally be described as serving a higher volume of vehicles at greater speeds. The higher volumes and speeds experienced on many rural streets are not compatible with traffic calming and may unintentionally create additional safety concerns. Each roadway has its own unique set of characteristics; therefore, eligibility of a specific roadway should be confirmed with DPW staff.

The underpinnings of the NTMP are based on a combination of parallel strategies, known collectively as the "Three E's":

- Education Sharing information and raising awareness; targeting drivers, pedestrians, and cyclists about the safest and best ways to share the road.
- Engineering Physical measures constructed to lower speeds, improve safety, or otherwise reduce the impacts of automobiles.
- Enforcement Targeted enforcement by the California Highway Patrol (CHP) to reinforce the emphasis on education and engineering aspects of the program.

This document focuses on the engineering aspects of neighborhood traffic calming, though education and enforcement play an important role in any engineering strategy. This document and informational flyers provide education, while the CHP conducts targeted speed enforcement. While targeted speed enforcement provides a positive influence on neighborhood streets, the demand for this service could easily outstrip the resources of any enforcement agency (i.e., CHP). Therefore, neighborhood traffic calming is a viable alternative that is always self-enforcing.

This program also considers the roadway network and design of new developments. Developers, with guidance from DPW staff, can reduce the need for future traffic calming by designing new streets that discourage speeding and cut-through traffic. To supplement these design principles, developers can incorporate traffic calming measures as part of the initial development.

NTMP DEVELOPMENT

This manual was developed with the assistance of an advisory committee composed of representatives from Placer County Planning and Engineering departments, California Highway Patrol, Placer County Fire Districts, Placer County Sheriff's department, Placer County Transit, Supervisory Districts, and local Municipal Advisory Council members. The advisory committee convened three times to review material and provide input on specific aspects of the NTMP process framework and toolbox.

The material presented to the advisory committee was based on a 2004 national survey conducted of 21 leading jurisdictions' traffic calming practices. The survey provided insight into the evolution of the traffic

calming field since the last in-depth report¹ almost a decade ago. The various approaches, policies, and uses of traffic calming devices reported in this survey provided a menu of alternatives to develop a Neighborhood Traffic Calming Program unique to Placer County.

FUNDING

Funding for the Placer NTMP is anticipated largely from the County's Road Fund, which will compete annually for funding amongst other programs. Funding supplied by the County's Road Fund will go towards staff time (operating cost) and construction costs (capital cost) of standard devices. As the DPW identifies the next fiscal budget, it may become apparent that other funding sources may be necessary to maintain the program or meet the anticipated demand. To offset the public demand and stretch the funding, residents will be required to contribute 75 percent of the costs for speed humps (or other vertical devices). Additional cost sharing may be necessary depending on annual funding and level of public demand. The need and proportional share to residents will be determined annually.

In the absence of funding or to expedite treatment, residents may elect to fund a local traffic calming plan. The neighborhood must prove the financial ability to fund 100 percent of the anticipated costs, which include plan development, engineering drawings, and construction. Upon proof of financial ability, the DPW can elect to authorize the neighborhood's request to develop a traffic calming plan.

In addition, residents could voluntarily elect to fund aesthetic upgrades to the standard devices. Such aesthetic upgrades could include landscaping or use of decorative materials (e.g., stamped concrete).

HOW TO USE THIS DOCUMENT

This document provides guidelines, not rigid requirements. These guidelines are primarily intended for DPW staff and residents in developing a neighborhood traffic management plan, and developers and staff in developing and reviewing new subdivision plans. The

This manual will likely evolve as DPW staff and community members work through the program. As lessons are learned, staff and community members may identify more efficient methods of implementing the program and better ways of disseminating information. DPW staff may also revise the design guidelines and cost estimates.

WHO TO CONTACT

To find out more information about the Neighborhood Traffic Management Program or whether your street is eligible for traffic calming, please contact:

- If you live on a County maintained roadway: The Department of Public Works at (530) 745-7500 or publicworks@placer.ca.gov.
- If you live on a Non-County maintained roadway: Your Local Fire District or Placer County Fire Protection Department at (530) 823-4155.

¹ Ewing, R. *Traffic Calming State-of-the-Practice*. Washington, D.C., USA: Institute of Transportation Engineers /Federal Highway Administration, 1999.

HOW TO USE THIS DOCUMENT

If you are a Resident, you should focus on the following chapters:

Chapter 2, Process Framework, to find out how to request traffic calming on your street and the steps necessary to implement a traffic calming plan.

Chapter 3, Toolbox, to discover what particular traffic calming devices are available and the advantages and disadvantages of each.

If you are an Engineer/Planner involved in the development of a new subdivision, you should focus on the following chapters:

Chapters 3 and **4, Toolbox** and **Toolbox Guidelines**, to discover what devices you can incorporate into your development.

Chapter 5, New Development Guidelines, for techniques to minimize the potential for future speeding and trafficrelated concerns.

DPW staff members should focus on the above Chapters as well as the following appendices:

Appendix A – Design Guidelines provides recommended design features to minimize design issues once implemented.

Appendix B – Traffic Calming on Snow Removal Routes provides guidance on which devices are eligible for use in areas of snowfall. Physical design considerations are also provided to accommodate snow removal equipment.

Appendix C – Standard Traffic Calming Templates provides standard designs templates that can be easily modified to fit specific roadways.